

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Currently amended) A method of protecting an actuator against failure, comprising the following steps:

[-] establishing a norm (206) of factors affecting [[the]]an operation of the actuator (201) as based on [[the]] an operating environment (301) of the actuator[.,];

[-] providing the norm (206) with a tolerance defining a condition for the operation of the actuator (201) in the operating environment (301);

[-] observing the operating environment (301) of the actuator (201) in order to detect a deviation that falls outside said tolerance, the observation being performed by means of an environmental fuse (220) having comprising a sensor member (204) with a first connecting surface (401) and a second connecting surface (402) for feeding a flux through them, an active layer (403) therebetween which is disposed between the first connecting surface and the second connecting surface, wherein the active later is arranged to cause a change in the flux's passing through the active layer (403) when

characterized in that the method comprises the following steps

cumulatively subjecting the active layer (403) to a component present in the operating environment (301), and

[-] limiting and/or interrupting a supply (203) to the actuator (201), in order to keep this in working order, in condition that when said deviation falls outside said condition tolerance for the operation.

2. (Currently amended) A method as defined in Claim 1, characterized in that wherein the method further comprises the step of generating an excitation signal by means of said sensor member (204).

3. (Currently amended) A method as defined in Claim 1, characterized in that wherein the method further comprises generating [[of]] a response by means of a functional member (204) of the environmental fuse (202), in response to an excitation signal.

4. (Currently amended) A method as defined in Claim 3, ~~characterized in that wherein~~ said response comprises a function in which the supply (203) to the actuator (201) is limited and/or interrupted.

5. (Currently amended) A method as defined in Claim 3, ~~characterized in that wherein~~ said response comprises an alarm function (409).

6. (Currently amended) A maintenance server (901), ~~characterized in that it has means for processing, storing comprising a block configured to process and store~~ information concerning an alarm from an environmental fuse and/or for generating a response in order to limit and/or interrupt the supply to that actuator whose environmental fuse is the source of the alarm, wherein said environmental fuse (220) has a sensor member (204) with a first connecting surface (401) and a second connecting surface (402) for feeding a flux through them, an active layer (403) ~~therebetween which is disposed between the first and second connecting surfaces,~~ wherein the active layer is arranged to cause a change in the flux's passing through the active layer (403) when cumulatively subjected to a component present in the operating environment (301), and ~~means for a block configured to limit and/or interrupt limiting and/or interrupting a supply (203) to the actuator (201), in order to keep this the actuator in a working order.~~

7. (Currently amended) A maintenance server (901) as defined in Claim 6, ~~characterized in that it is implemented with software means comprising software as an implementation.~~

8. (Currently amended) A maintenance server (901) as defined in Claim 6, ~~characterized in that it has means for reporting comprising a block configured to report~~ alarm information to a data network.

9. (Currently amended) A maintenance server (901) as defined in Claim 8, ~~characterized in that wherein~~ said data network comprises one or a combination of the following: Internet, a local network, and a network based on a cellular system and/or combination of some of these.

10. (Currently amended) An environmental fuse (202) for protecting an actuator (201) against failure, the environmental fuse (202) ~~having comprising~~ a sensor member (204) to detect a change that occurs in an environment (301) and deviates from a tolerance according to a norm (206), and a functional member (205) ~~having functional means~~ (408) to limit, a block configured to limit or interrupt the supply (203) to the said actuator (201) and/or to give an alarm (409), said environmental fuse ~~being characterized in that the environmental fuse has further comprising~~ a sensor member (204) having a first connecting surface (401) and a second connecting surface (402) for feeding a flux ~~them~~, an active layer (403) ~~therebetween disposed between the first and second connecting surfaces~~, wherein the active layer is ~~configured which is arranged~~ to cause a change in the flux's passing through the active layer (403) when cumulatively subjected to a component present in the operating environment (301).

11. (Currently amended) An environmental fuse (202) as defined in Claim 10, ~~characterized in that it comprises further comprising~~ a collecting arrangement for collecting a component present in the composition of the environment (301).

12. (Currently amended) An environmental fuse (202) as defined in Claim 11, ~~characterized in that wherein~~ said collecting arrangement is based on the collection of a component present in the environment (301) on a substrate through diffusion, electrical interaction, impaction, interception, filtering and/or deposition.

13. (Currently amended) An environmental fuse (202) as defined in Claim 11, ~~characterized in that wherein~~ the collecting arrangement ~~has comprises~~ a collecting substrate comprising a wire, strip, dielectric substrate, conductive substrate and/or filter.

14. (Currently amended) An environmental fuse-(202) as defined in Claim 10, ~~characterized in that wherein~~ the sensor member (204) is ~~arranged~~configured to detect particulate material, gas and/or moisture.

15. (Currently amended) An environmental fuse as defined in Claim 10, ~~characterized in that said flux is~~wherein said flux comprises a flux of electric current.

16. (Currently amended) An environmental fuse (202)-as defined in Claim 10, ~~characterized in that wherein~~ the change in said flux's passing is based on a change of the opacity of a medium and/or an interface thereof.

17. (Currently amended) An environmental fuse (202)-as defined in Claim 16, ~~characterized in that said flux is~~wherein said flux comprises a flux of radiation.

18. (Currently amended) An environmental fuse (202)-as defined in Claim 10, ~~characterized in that wherein~~ said actuator (201) is ~~the~~comprises a controller of another actuator.

19. (Currently amended) An environmental fuse (202)-as defined in Claim 10, ~~characterized in that wherein~~ the environmental fuse (202) ~~has~~comprises:

[[[-]]] a first component (E1)-of the sensor member (204)-to detect a first change that occurs in the environment (301)-and deviates from a first tolerance according to a norm-(206), and

[[[-]]] a second component (E2)-of the sensor member (204)-to detect a second change that occurs in the environment (301)-and deviates from a second tolerance according to a norm-(206).

20. (Currently amended) An environmental fuse (202) as defined in Claim 19, **characterized in that** wherein said first component (E1) and second (E2) component (E1, E2) of the sensor member (204) are integrated into an integrated sensor member.

21. (Currently amended) An environmental fuse (202) as defined in Claim 10, **characterized in that** wherein the environmental fuse has fuse comprises:

[[-]] a first functional member having functional means configured to limit and/or [,-] interrupt a first part of the supply to the actuator to be protected and/or to give an alarm, and

[[-]] a second functional member having functional means configured to limit and/or [,-] interrupt a second part of the supply to the actuator to be protected and/or to give an alarm.

22. (Currently amended) An environmental fuse (202) as defined in Claim 10, **characterized in that** wherein the environmental fuse (202) has a modular component to be replaced with another similar component.

23. (Currently amended) An environmental fuse (202) as defined in Claim 22, **characterized in that** the wherein the modular component of the environmental fuse-fuse (202) comprises the sensor member.

24. (Currently amended) An environmental fuse (202) as defined in Claim 10, **characterized in that** wherein the environmental fuse comprises a memory for storing one or more of an environment, actuator, norm, and/or and a quantity value dependent on the state of the environment.

25. (Currently amended) An environmental fuse (202) as defined in Claim 10, **characterized in that** wherein the environmental fuse comprises one or more of a memory for authenticating an environment, actuator, norm, and/or and a quantity value dependent on the state of the environment.

26. (Currently amended) An environmental fuse (202)—as defined in Claim 10, ~~characterized in that wherein~~ the sensor member (204) of the environmental fuse (202) ~~has comprises~~ an active layer (403, E3) having one or more of a capacitance, an inductance, and/or and a resistance.

27. (Currently amended) An environmental fuse (202)—as defined in Claim 26, ~~characterized in that wherein~~ said active layer (403, E3) ~~forms is configured to form~~ part of a measuring bridge.

28. (Currently amended) An actuator (201), ~~characterized in that wherein~~ the actuator ~~has an~~comprises the environmental fuse (202) according to Claim 10.

29. (Currently amended) An actuator (201)—as defined in Claim 28, ~~characterized in that it has~~further comprising one or more of an electric drive, power supply, drive controller, pump, and fan and/or a preferred combination of these.